

In the claims:

1. (Currently amended) A method of determining crop parameters in an agricultural harvester with a compacting device, comprising the steps of taking a crop by the agricultural harvester; transporting the crop in a transporting direction during a working process by transporting means; deviating from the transporting means a crop probe during the working process to the compacting device which is a separate device located outside the transporting means; filling the compacting device during the working process with the deviated crop probe; compacting the crop probe in the compacting device with at least one defined compression for avoiding air inclusions and obtaining a homogenous crop probe; and determining at least one crop parameter of the crop probe depending on the at least one defined compression of the crop probe produced by the compacting device located outside the transporting means.

2. (Previously presented) A method as defined in claim 1, wherein the compacting device has at least one movable compacting element; and further comprising determining the defined compression of the crop probe on a basis of a compacting force which is introduced by the compacting element into the crop probe.

3. (Previously presented) A method as defined in claim 1; and further comprising adjusting the defined compression depending on the crop to be sensed.

4. (Previously presented) A method as defined in claim 1, wherein said determining at least one crop parameter includes determining a volume of the crop probe.

5. (Previously presented) A method as defined in claim 1, wherein said determining at least one crop parameter includes determining a mass of the crop probe.

6. (Previously presented) A method as defined in claim 1; and further comprising determining, from a volume and a mass of the crop probe, a density of the crop probe.

7. (Previously presented) A method as defined in claim 1; and further comprising using as the at least one crop parameter a moisture value of the crop probe; and correcting the moisture value on a basis of a density of the crop probe.

8. (Previously presented) A method as defined in claim 1; and further comprising using a parameter which is connected with the crop probe for a step selected from the group consisting of a correction and a determination of at least one further crop parameter determined in the harvester.

9. (Previously presented) A method as defined in claim 8; and further comprising using as the parameter connected with crop probe a parameter selected from the group consisting of a crop probe parameter, a crop parameter and both, and further selected from the group consisting of a compression, a volume, a mass, a density and a moisture.

10. (Previously presented) A method as defined in claim 1; and further comprising providing in the harvester a yield measuring device; and determining by the yield measuring device a parameter selected from the group consisting of a crop throughput, a crop yield, and both with consideration of a determined density of the crop probe.

11. (Previously presented) A method as defined in claim 1, wherein the agricultural harvester is a forage harvester with at least one feed roll and a deflectably supported compression roll, and at least one spring for compacting the crop transported between the at least one feed roll and the

compression roll; and further comprising determining on a basis of a deviation of the at least one compression roll a crop throughput through the harvester; during a compacting process of the crop probe in the compacting device determining a compacting force and an associated volume of the crop probe; determining at least one ratio between the compacting force and the volume; and taking into consideration the at least one ratio during the determination of the crop throughput.

12. (Previously presented) A method as defined in claim 1; and further comprising performing during filling of the compacting device an oscillating movement of a compacting element with a reduced compacting action, until at least a defined compression of the crop probe is obtained.

13. (Currently amended) An agricultural harvester, comprising means for taking a crop by the agricultural harvester; means for transporting the crop in a transporting direction during a working process; means for deviating from the transporting means a crop probe during the working process; at least one compacting device which is a separate device located outside of said transporting means and is fillable during the working process with the deviated crop probe and compacting the crop probe with at least one defined compression for avoiding air inclusions and obtaining a homogenous crop probe; and at least one sensor provided for determining at the defined

compression of the crop probe in the compacting device located outside the transporting means.

14. (Previously presented) An agricultural harvester as defined in claim 12, wherein said compacting device has at least one probe chamber and a compacting piston movable in said probe chamber, so that a compacting force applied by said compacting piston is determined by said at least one sensor formed as a pressure sensor.

15. (Previously presented) An agricultural harvester as defined in claim 13; and further comprising a position sensor for detecting a position of a compacting piston in said compacting device.

16. (Previously presented) An agricultural harvester as defined claim 13; and further comprising means forming an opening through which the crop probe is supplied directly from a crop stream in the harvester to said compacting device.

17. (Previously presented) An agricultural harvester as defined in claim 16, wherein said agricultural harvester is a forage harvester provided with a chopper drum and a drum body located on the latter and deviating a product, said opening being formed on said product-deviating drum body.

18. (Previously presented) An agricultural harvester as defined in claim 13, wherein said compacting device has a movable compacting element which returns back the crop probe into a crop stream of the harvester.

19. (Previously presented) An agricultural harvester as defined in claim 14, wherein said probe chamber and a movement direction of said compacting piston are oriented substantially in a transporting direction of the crop in the region of an opening through which the crop probe is supplied from a crop stream.

20. (Withdrawn) A method of determining crop parameters in an agricultural harvester with a compacting device, comprising the steps of taking a crop by the agricultural harvester and transporting the crop in a transporting direction during a working process; deviating from the transported crop a crop probe during the working process; filling the compacting device during the working process with the crop probe; and determining at least one crop parameter of the crop probe depending on at least one defined compression of the crop probe produced by the compacting device; and further comprising opening a probe chamber of the

compacting device in a traveling direction of the agricultural harvester which is opposite to the transporting direction of the crop.

21. (Withdrawn) A method as defined in claim 20; and further comprising compacting the crop in the probe chamber in a direction which corresponds to an orientation of the probe chamber and coincides with the transporting direction of the crop.

22. (Withdrawn) ~~A method as defined in claim 1;~~ and further comprising performing the deviating from the transporting crop the crop probe through a drum button of a unit including a rotatable chopper drum and the drum button.

23. (Withdrawn) An agricultural harvester, comprising means for taking a crop by the agricultural harvester and transporting the crop in a transporting direction during a working process; means for deviating from the transported crop a crop probe during the working process; at least one compacting device which is fillable during the working process with the crop probe; and at least one sensor provided for determining a defined compression of the crop probe located in the compacting device, wherein said compacting device has a probe chamber which is open in a traveling

direction of an agricultural harvester and opposite to the transporting direction of the crop.

24. (Withdrawn) An agricultural harvester as defined in claim 23, wherein said compacting device has a compacting element which provides compacting in a direction corresponding to the orientation of said probe chamber and coinciding with said transporting direction of the crop.

25. (Withdrawn) An agricultural harvester, comprising means for taking a crop by the agricultural harvester and transporting the crop in a transporting direction during a working process; means for deviating from the transported crop a crop probe during the working process; at least one compacting device which is fillable during the working process with the crop probe; and at least one sensor provided for determining a defined compression of the crop probe located in the compacting device; and further comprising a unit including a rotatable chopper drum and a drum bottom cooperating with one another, said means for deviating from the transporting crop the crop probe being operative for deviating the crop probe through said bottom into said compacting device.